

# Iowa DNR Frog and Toad Survey Instructions

## **IN PREPARATION**

1. Listen to your frog call CD. Depending on where you live, there will be about 12 songs you will need to learn. If you have a tape recorder, or digital recorder, you can tape any calls that you don't feel confident about identifying. You can then compare the call in question with your identification cd.
  2. First Year: Pick Your Sites
    - a. Pick 5-8 wetland sites in an area convenient for you. Get permission if some are on private land.
    - b. Map and Describe the Sites
      - Get UTM's
        1. Mark the location of the site on a map (sportsman's atlas, topo, plat map) and make note of the surrounding landscape. With the plat map or sportsman's atlas you can easily determine your Tier (Township), range and section which you can then plug into [cairo.gis.iastate.edu](http://cairo.gis.iastate.edu). You can then pinpoint the wetland location here and get your UTM coordinates.
        2. Mark the site location on a detailed map and send to the wildlife diversity program and we will determine your UTM coordinates. 1436 255<sup>th</sup> St., Boone, IA 50036
        3. Mark site location with GPS unit –make sure it is recording UTMS and is using the NAD 83 datum.
      - Determine Habitat Type
- SEE CODE SHEET FOR APPROPRIATE HABITAT TYPES.
3. First Year or New Site: Fill out (or modify if needed) Survey Route Description data sheet. Unless there is a change you should not have to fill in this sheet in subsequent years.  
Subsequent Years: Note any changes to data on Survey Route Description data sheet.

## **CONDUCTING THE SURVEY:** Bring a companion if you like!

1. Run the survey once during each time period: April 1-28, May 7-June 4, and June 13-July 10 - Be sure to visit all the sites during one night.
2. Try to have water temperatures close to 50° Fahrenheit during the first survey, 60°F during the second, and 70°F during the third survey period. Water temperature seems to influence the singing of the frogs. When feasible, take the water temperature.
3. Run the survey **after dark**, when the water temperatures meet the minimum standards and the wind is less than 8 mph. Warm, cloudy evenings with little wind and high humidity (even a light drizzle) are ideal. If a cold front, high winds, or heavy rains hit during the survey, stop the survey, and repeat it at a later date.
4. AT EACH SITE:
  - Pull up to the site and get out of car.
  - If this is your first site record weather and time info.
  - If at all possible ascertain water temp and whether the site is dry or wet.
  - Wait a few minutes for things to settle.
  - Start your watch and listen for 10 minutes.
  - At 5 minutes record the abundance codes for each species in the table on the data sheet
  - Move to the next site.
5. TIPS:
  - If the chorus is so loud you think some of the less conspicuous songs are being drowned out, record your initial data, then make a loud sound to silence the frogs (honk your horn, clap your hands, close your car door). Then listen for the less conspicuous species as the singing resumes.
  - Record any questionable songs, and confirm them later by comparison to the master CD. Make sure you note on the recording the date and at which site you recorded, so you can properly enter your information on the data sheet.
  - **If you encounter any problems, or the area has been altered since your last survey, please note it in the comments section.** Please verify by sight any pickerel frog, crawfish frog, wood frog, or other species found out of their expected range.

HAVE FUN AND THANK YOU!

## Code Sheets

### Iowa NatureMapping (NM) Codes for Frogs and Toads

Family	scientific name	common name	NM code
Bufonidae	<i>Bufo americanus americanus</i>	American toad	AMTOAD
	<i>Bufo cognatus</i>	great plains toad	GRPLTD
	<i>Bufo woodhousii woodhousii</i>	Woodhouse's toad	WOODTOAD
	<i>Bufo woodhousii fowleri</i>	Fowler's toad	FOWLER
Hylidae	<i>Acris crepitans blanchardi</i>	Blanchard's cricket frog	CRICKET
	<i>Hyla chrysoscelis</i>	Cope's gray treefrog	COPETREE
	<i>Hyla versicolor</i>	eastern gray treefrog	GRAYTREE
	<i>Pseudacris crucifer</i>	northern spring peeper	PEEPER
	<i>Pseudacris triseriata triseriata</i>	western chorus frog	CHORUS
	<i>Spea bombifrons</i>	plains spadefoot toad	SPADE
Pelobatidae	<i>Rana areolata circulosa</i>	northern crawfish frog	CRAW
Ranidae	<i>Rana catesbeiana</i>	bullfrog	BULL
	<i>Rana clamitans melanota</i>	green frog	GREEN
	<i>Rana palustris</i>	pickerel frog	PICKERAL
	<i>Rana pipiens</i>	northern leopard frog	NLEOP
	<i>Rana blairi</i>	plains leopard frog	PLEOP
	<i>Rana sphenoccephala</i>	southern leopard frog	SLEOP
	<i>Rana sylvatica</i>	wood frog	WOOD

### Relative Abundance Index

0 = no individuals heard

1 = individuals can be counted; there is space between the calls

2 = calls of individuals can be distinguished, but there is some overlapping

3 = full chorus; calls are constant, continuous, and overlapping

### Wind Speed Codes

0 = 0 mph; still – smoke rises vertically

1 = 1-3 mph; calm – direction of wind shown by smoke drift but not by wind vanes

2 = 4-7 mph; light – wind easily felt on face, leaves rustle, vanes moved by wind

3 = 8-12 mph; gentle – leaves and twigs in constant motion, wind extends light flag

4 = 13-18 mph; moderate – raises dust and loose paper, small branches are waving

5 = 19-24 mph; fresh – small trees in leaf begin to sway, crested wavelets on water

### Sky Codes

0 = clear or few clouds      3 = fog

1 = partly cloudy or variable      4 = drizzle

2 = cloudy or overcast      5 = rain

## Iowa NatureMapping (NM) Habitat Codes

Frogs and toads can be found in a wide array of habitats. The NM codes used in this survey are as follows:

Code	Habitat type	Notes
WTDR	wetland/dry	included for wetlands that may dry up from one run to the next
LKSH	lake shore	shallow areas along edge of large waterbody
POND	pond	Mostly farm ponds; ponds with little or no emergent or floating vegetation
GOLF	golf course	usually contain water areas that may harbor amphibians, ponds on Golf courses
GRSS	grassed waterway or terrace	usually associated with crop fields
DICH	drainage ditch	usually associated with crop fields or roads
MUD	sparsely vegetated sand/mud flats	found in rivers and streams
WTFL	wetland/floating leaved plants	water areas with submerged and floating vegetation
WTCT	wetland/vegetated	have emergent vegetation such as cattails and bulrushes
FEN	fen wetland	very rare in Iowa; specialized hydrology and plants; saturated soils
SEDG	sedge meadows	seasonally flooded with dominant vegetation of sedges, very few woody plants
FLSH	Seasonally flooded lowland deciduous-shrubland	dominated by shrubs; can be backwater areas near rivers and streams
WTSH	shrub marsh	wetland dominated by willow or other shrubs, not associated with river or stream
FLDW	seasonally flooded lowland deciduous-woodland	dominated by trees fairly open canopy; can be backwater areas near rivers and streams
FLDF	seasonally flooded lowland deciduous-forest	dominated by trees, closed canopy; can be backwater areas near rivers and
OPNW	open water	reservoir or lake
RIVR	river/stream	river or stream bordered trees/shrubs
ORIV	open riverine	river/stream bordered by non-woody vegetation

### Singing Chronology for Breeding Frogs and Toads

